

(19) World Intellectual Property Organization
International Bureau



PCT



(43) International Publication Date
4 August 2005 (04.08.2005)

(10) International Publication Number
WO 2005/069900 A3

(51) International Patent Classification:

G01N 33/53 (2006.01) G01N 33/534 (2006.01)
G01N 33/532 (2006.01) C12Q 1/60 (2006.01)

(21) International Application Number:

PCT/US2005/001469

(22) International Filing Date: 14 January 2005 (14.01.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/537,341 16 January 2004 (16.01.2004) US

(71) Applicant (for all designated States except US): MERCK & CO., INC. [US/US]; 126 East Lincoln Avenue, RY 60-30, Rahway, NJ 07065 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): GARCIA-CALVO, Margarita [US/US]; Westfield, NJ (US).

(74) Agent: FOLEY & LARDNER LLP; Washington Harbour, 3000 K. Street, N.W., Suite 500, Washington, DC 20007-5143 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
8 June 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NPC1L1 (NPC3) AND METHODS OF IDENTIFYING LIGANDS THEREOF

(57) Abstract: The present invention provides human, rat and mouse NPC1L1 polypeptides and polynucleotides encoding the polypeptides. Methods for detecting ligands which bind to NPC1L1 and block intestinal cholesterol absorption are provided. Also included is a method of identifying ligands which bind to NPC1L1 using membranes derived from brush border membrane preparations. Compounds that bind to NPC1L1 can be used for inhibiting intestinal cholesterol absorption in a subject.



WO 2005/069900 A3